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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR    | ATTORNEY DOCKET NO.            | CONFIRMATION NO.       |
|--|-------------|-------------------------|--------------------------------|------------------------|
| 10/759,661   | 01/16/2004  | Edward Joseph Gallagher | SVL920030084US1                | 8023                   |
| 63608  | 7590        | 06/06/2007              |                                |                        |
| IBM/FAY SHARPE<br>1100 SUPERIOR AVENUE<br>SEVENTH FLOOR<br>CLEVELAND, OH 44114 |             |                         | EXAMINER<br>VERDI, KIMBLEANN C |                        |
|  |             |                         | ART UNIT<br>2109               | PAPER NUMBER           |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                                  |  |
|------------------------------|-------------------------------|----------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/759,661 | Applicant(s)<br>GALLAGHER ET AL. |  |
|                              | Examiner<br>Kacy Verdi        | Art Unit<br>2109                 |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**


- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date January 16, 2004.

- 4) ☐ Interview Summary (PTO-413)  
     Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

  
**WILLIAM THOMSON**  
 SUPPLY PATENT EXAMINER  
 INTER 2100

### **DETAILED ACTION**

This office action is in response to the Application filed on January 16, 2004. Claims 1-27 are pending in the current application.

#### ***Drawings***

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 12a, 12b, and 12n of Fig. 1. Though the specification discusses component 12 (API) it does not expressly disclose components 12a, b...n.
3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: claim 19 refers to a computer program product comprising a computer usable medium having computer readable program code means embodied in said medium, however the specification does not disclose a computer usable medium.

***Claim Objections***

5. Claims 10-27 are objected to because of the following informalities:
- a. claim 10, line 10, the recitation of "...said comparing..." and lines 12 and 15 the recitation of "...said comparing means..." should be "...said means for comparing...";
  - b. claims 11, 12, and 13, line 2, the recitation of "...said comparing means..." should be "...said means for comparing...";
  - c. claims 14 and 15, line 2, the recitation of "...said parsing means..." should be "...said means for parsing...";
  - d. claims 16-18 are rejected for being dependent on an objected base claim 10;
  - e. claim 19, line 12, the recitation of "...said comparing..." and lines 13 and 16 the recitation of "...said comparing program code..." should be "...said program code for comparing...";
  - f. claim 19, line 2, , the recitation of "...said medium..." should be "...said computer usable medium ..."

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- g. claims 20, 21, and 22, lines 1-2, the recitation of "...said comparing program code..." should be "...said program code for comparing...";
- h. claims 23 and 24, lines 1-2, the recitation of "...said parsing program code..." should be "...said program code for parsing..."; and
- i. claims 25-27 are rejected for being dependent on an objected base claim 19.
- j. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-6, 10-15, 18-24, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent 6,971,093 B1 to Spring.

8. As to claims 1, 10, and 19, Spring teaches a method, system, and computer program product of parameter passing of data structures where an API and corresponding stored procedures are at different version/release levels, the method comprising:

receiving (e.g. submitted for installation), from a calling program (e.g. Interacting Module is installed is submitted for installation, col. 7, line 6), a data structure (e.g.

interface, Fig. 4B) having at least one data structure element (e.g. Number of Abstract Routines, 446, Fig. 4B) (Interacting Modules interact with first module (e.g. Core Module) through an interface, which is described using the same data structure used to define the interface of the Core Module, Fig. 4B, col. 14, lines 59-61);

parsing (e.g. obtain) the data structure (e.g. interface) for a first version identifier (e.g. Interacting Version) of the data structure (obtain Interacting Version of interacting module to install, step 204, Fig. 2A);

comparing the first version identifier (e.g. Interacting Version) (e.g. Interacting Version) to a second version identifier (e.g. Core Version) of the stored procedures (e.g. Core Module) (compare core version to interacting version, step 206, Fig. 2A);

when said comparing of the first version identifier (e.g. Interacting Version) with the second version identifier (e.g. Core Version) is indicative of a data structure compatibility between said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) (e.g. Core Version = Interacting Version, step 208, Fig. 2A), parsing (e.g. installing) all of the data structure elements of the data structure (Interacting Module installed for use with Core Module, step 210, Fig. 2A); and

when said comparing of the first version identifier (e.g. Interacting Version) with the second version identifier (e.g. Core Version) is indicative of a data structure incompatibility (e.g. Core Version later than Interacting Version, step 212, Fig. 2A) between said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module), parsing (e.g. installing) only the data structure elements of the data structure that are known to both (e.g. backward compatible) of said calling program (e.g.

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Interacting Module) and said stored procedures (e.g. Core Module) (Interacting Module installed for user with backward compatible core module, step 214, Fig. 2A) .

As to claim 19, Spring teaches a computer program product comprising a computer usable medium having computer readable program code means embodied in said medium (instructions may be read into main memory 606 from another computer readable medium, such as storage device 610, Fig 6, execution of the sequences of instructions contained in main memory 606 causes processor 604, Fig. 6 to perform the process steps described, col. 17, lines 48-53).

9. As to claims 2, 11, and 20, Spring teaches the method as set forth in claim 1, the system for passing parameters of data structures as set forth in claim 10, and the computer program product as set forth in claim 19, wherein said comparing is indicative of a data structure incompatibility between said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) when the first version identifier (e.g. Interacting Version) is missing (e.g. Core Version Number is earlier than the Interacting Version Number) (If the Core Version Number is earlier than the Interacting Version Number, or the Core Module is not backward compatible, then the modules are not compatible, and control passes to step 220, Fig. 2A, in step 220, Fig. 2A the module is not installed, and any messages or warnings to the user are issued, col. 7, lines 48-54).

10. As to claims 3, 12, and 21, Spring teaches the method as set forth in claim 1, the system for passing parameters of data structures as set forth in claim 10, and the computer program product as set forth in claim 19, wherein said comparing is indicative

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of a data structure compatibility (versions number are equal, modules are compatible, col. 7, lines 25-28) between said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) when the first version identifier (e.g. Interacting Version) matches the second version identifier (e.g. Core Version) (Core Version = Interacting Version, step 208, Fig. 2A, Interacting Module installed for use with Core Module, step 210, Fig. 2A).

11. As to claims 4, 13, and 22, Spring teaches the method as set forth in claim 1, the system for passing parameters of data structures as set forth in claim 10, and the computer program product as set forth in claim 19, wherein said comparing is indicative of a data structure incompatibility (e.g. or backward compatibility) between said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) when at least one of:

the first version identifier (e.g. Interacting Version) is less than the second version identifier (e.g. Core Version) (e.g. Core Version later than Interacting Version, step 212, Fig. 2A, Interacting Module installed for user with backward compatible core module, step 214, Fig. 2A) or missing (e.g. Core Version Number is earlier than the Interacting Version Number) (If the Core Version Number is earlier than the Interacting Version Number, or the Core Module is not backward compatible, then the modules are not compatible, and control passes to step 220, Fig. 2A, in step 220, Fig. 2A the module is not installed, and any messages or warnings to the user are issued, col. 7, lines 48-54); and



the first version identifier (e.g. Interacting Version) greater than the second version identifier (e.g. Core Version) (e.g. Core Version Number is earlier than the Interacting Version Number) (If the Core Version Number is earlier than the Interacting Version Number, or the Core Module is not backward compatible, then the modules are not compatible, and control passes to step 220, Fig. 2A, in step 220, Fig. 2A the module is not installed, and any messages or warnings to the user are issued, col. 7, lines 48-54).

12. As to claims 5, 14, and 23, Spring teaches the method as set forth in claim 4, the system for passing parameters of data structures as set forth in claim 13, and the computer program product as set forth in claim 22, wherein said parsing only the data structure elements of the data structure that are known to both of said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) includes:

parsing (e.g. installing) only the data structure elements of the data structure that are known (e.g. backward compatible) to the calling program (e.g. Interacting Module) when the first version identifier (e.g. Interacting Version) is less than the second version identifier (e.g. Core Version) (e.g. Core Version later than Interacting Version, step 212, Fig. 2A, Interacting Module installed for user with backward compatible core module, step 214, Fig. 2A).

13. As to claims 6, 15, and 24, Spring teaches the method as set forth in claim 4, the system for passing parameters of data structures as set forth in claim 13, and the computer program product as set forth in claim 22, wherein said parsing only the data

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structure elements of the data structure that are known to both of said calling program (e.g. Interacting Module) and said stored procedures (e.g. Core Module) includes: parsing only the data structure elements of the data structure that are known (e.g. compatible Core Module) to the stored procedures (e.g. Core Module) when the first version identifier (e.g. Interacting Version) is greater than the second version identifier (e.g. Core Version) (If the Core Version Number is earlier than the Interacting Version Number, or the Core Module is not backward compatible, then the modules are not compatible, and control passes to step 220, Fig. 2A, in step 220, Fig. 2A the module is not installed, and any messages or warnings to the user are issued, the user is directed to a source for a compatible core module, col. 7, lines 48-54).

14. As to claims 18 and 27, Spring teaches the system for passing parameters of data structures as set forth in claim 10 and the computer program product as set forth in claim 19, wherein the version identifier (e.g. composite version number, col. 8, lines 9-11) includes:

a version number (major version number, col. 8, line 5); and

a release number (minor version number, col. 8, line 7).

***Claim Rejections - 35 USC § 103***

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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16. Claims 7-9, 16-17, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 6,971,093 B1 to Spring in view of United States Patent 5,742,810 to Ng et al. (hereinafter Ng).

17. As to claims 7, 16, and 25, Spring does not teach the method as set forth in claim 1, the system for passing parameters of data structures as set forth in claim 10, and the computer program product as set forth in claim 19, wherein the receiving includes receiving the data structure having a BLOB/CLOB pair.

However Ng teaches receiving includes receiving the data structure having a BLOB/CLOB (e.g. BLOB/SQL character data type) pair (DBMS receives BLOB from Client Application, step 510, Fig. 5, DBMS receives SQL Character Data Type from Client Application, step 610, Fig. 6, in the passing of arrays as host variables, a character large object (CLOB) may also be used in the packing/unpacking process, col. 8, lines 2-4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the data structure of Spring with the teachings of BLOB/CLOB pair from Ng because this feature would have provided a mechanism to translate a host variable that is not recognized as a SQL data type into a BLOB, in order to pass the host variable to a stored procedure (col. 2, lines 7-15 and 23-29 of Ng).

18. As to claims 8, 17, and 26, Spring as modified by Ng teaches the method as set forth in claim 7, the system for passing parameters of data structures as set forth in claim 16, and the computer program product as set forth in claim 25, wherein:

the receiving the data structure having the BLOB/CLOB pair includes:

receiving a CLOB having at least one character data value (DBMS receives SQL Character Data Type from Client Application, step 610, Fig. 6, stored procedure populates data area (e.g. with character data value contained in Character data type sent from client); and

receiving a BLOB (DBMS receives BLOB from Client Application, step 510, Fig. 5 of Ng) having a version identifier (e.g. composite version number, col. 8, lines 9-11 of Spring), a data element ID for each respective character data value (section 706, Fig. 7, data identified by the user-definition of the array in host language, col. 7, lines 63-64 of Ng), a data type for each respective character data value (data types within the array, col. 7, lines 59-60 of Ng), and a data length for each respective character data value (lower bound and maximum extent (or length) of data, col. 7, lines 59-60 of Ng).

19. As to claim 9, Spring as modified by Ng teaches the method as set forth in claim 8, wherein the receiving a BLOB having a version identifier (e.g. composite version number, col. 8, lines 9-11 of Spring) includes receiving a BLOB (DBMS receives BLOB from Client Application, step 510, Fig. 5 of Ng) having a version number (major version number, col. 8, line 5 of Spring) and a release number (minor version number, col. 8, line 7 of Spring).

### ***Conclusion***

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

United States Patent 4,992,971 to Hayashi discloses a language translating and linking system for translating and linking into a load program a plurality of source programs

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which include a calling program, having a first number of calling parameters, and a called program, having a second number of called parameters, the calling parameters must correspond to the respective called parameters.

United States Patent 5,862,378 to Wang et al. discloses a method, apparatus, and article of manufacture for passing a VisualBasic array argument to an SQL stored procedure executed by a computer.

United States Patent 6,327,629 B1 to Wang et al. discloses a method, apparatus and article of manufacture for a universal calling interface for executing a stored procedure in a computer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kacy Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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May 24, 2007  
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